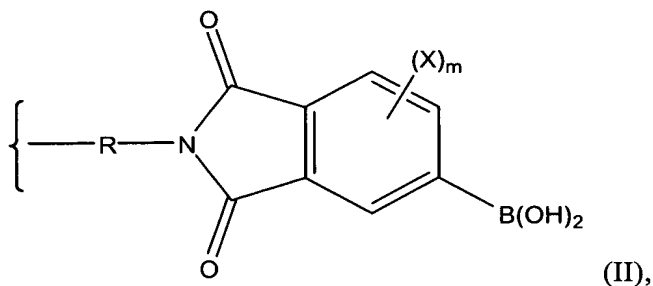
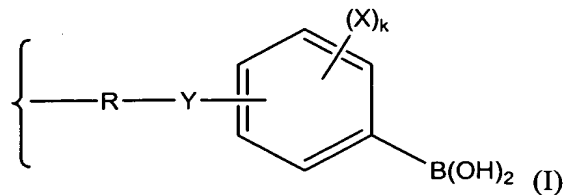


## Amendments to the Claims

1. **(Original)** A polymer substituted with at least one group represented by Structural Formula (I) or (II):



wherein:

R is a C6-C30 hydrocarbylene group optionally interrupted by one or more heteroatoms selected from the group consisting of NH, S, and O;

each X is independently a substituted or unsubstituted alkyl group, an electron withdrawing group, or an electron donating group meta to the boronic acid moiety;

Y is  $\text{-C(O)Z-}$ ,  $\text{-ZC(O)-}$  or  $\text{-S(CH}_2\text{)}_n\text{-}$ ;

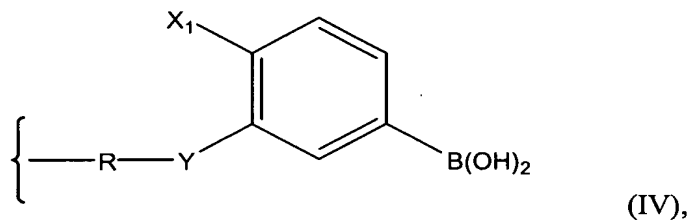
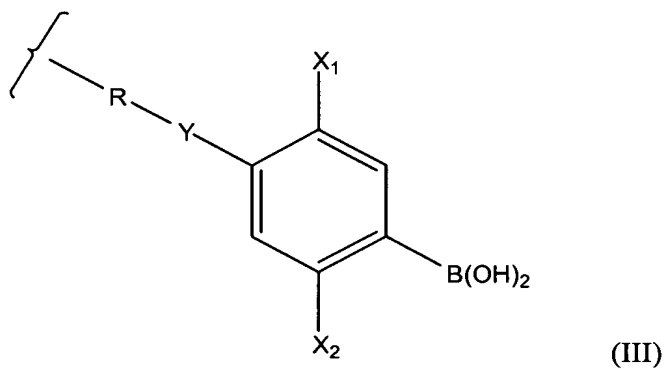
Z is a bond,  $\text{CH}_2\text{S}$ , S, NH, or O;

m is an integer from 0 to 3;

k is an integer from 0 to 4; and

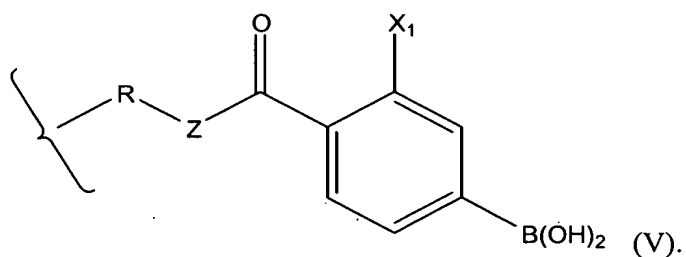
n is an integer from 0 to 5.

2. **(Original)** The polymer of Claim 1, wherein each X is independently  $\text{-H}$ , a halogen, nitrile, ester or sulfone.
3. **(Original)** The polymer of Claim 2, wherein said polymer is substituted with at least one group represented by Structural Formula (III) or (IV):

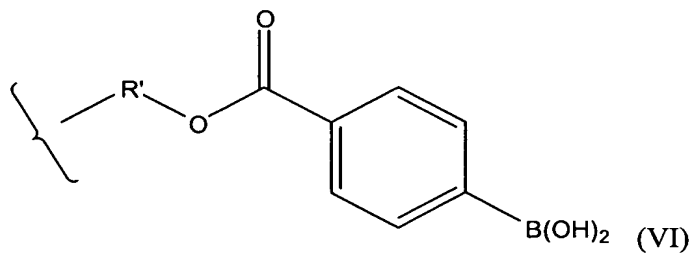


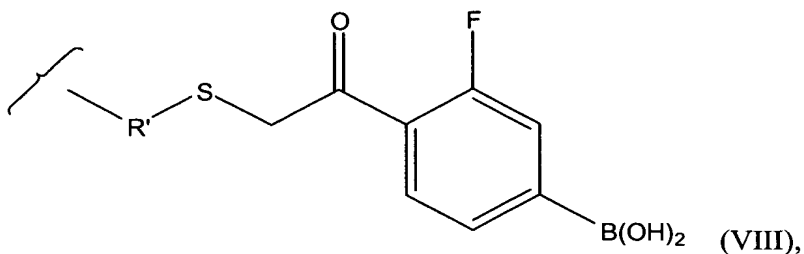
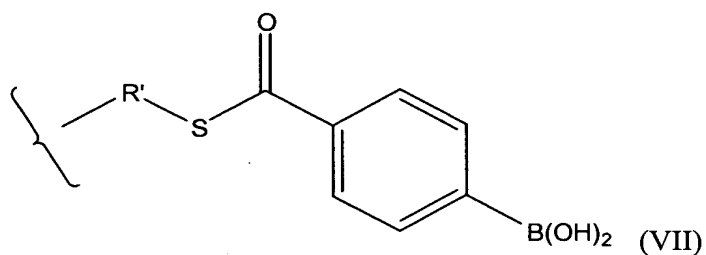
wherein  $X_1$  and  $X_2$  are each independently  $-H$ , a halogen or nitrile; and  $Y$  is  $-C(O)Z-$  or  $-ZC(O)-$ .

4. **(Original)** The polymer of Claim 3, wherein said polymer is substituted with at least one group represented by Structural Formula (V):



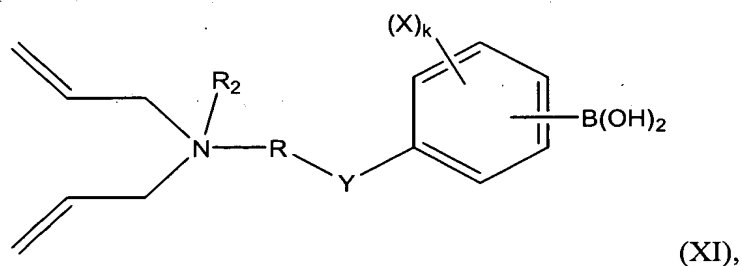
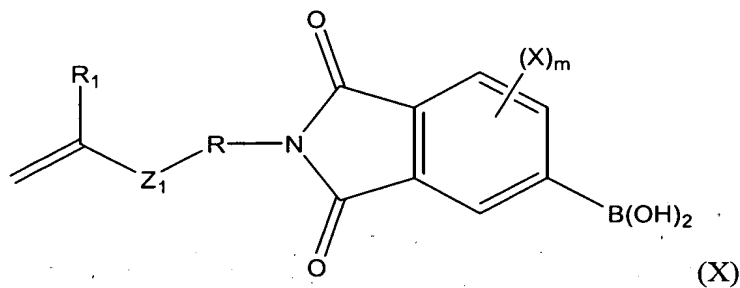
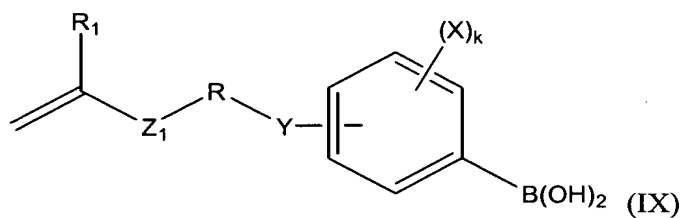
5. **(Original)** The polymer of Claim 4, wherein said polymer is substituted with at least one group represented by Structural Formula (VI), (VII), or (VIII):





wherein R' is a C6-C12 alkylene group.

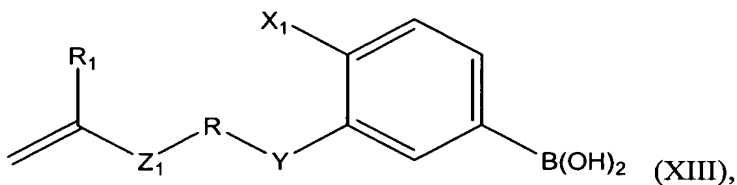
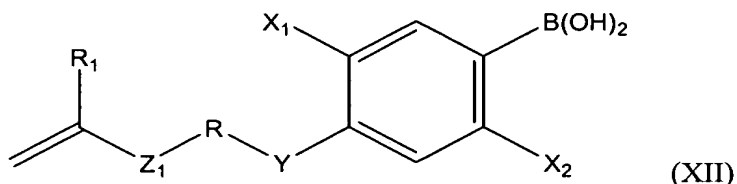
6. **(Currently Amended)** A The polymer of claim 1, wherein the polymer comprised comprises of polymerized monomer units, wherein the monomer unit is represented by Structural Formula (IX), (X), or (XI):



wherein:

~~R is a C6-C30 hydrocarbylene group optionally interrupted by one or more heteroatoms selected from the group consisting of NH, S, and O;~~  
~~R<sub>1</sub> is -H or a lower alkyl group;~~  
~~R<sub>2</sub> is -H, a lower alkyl group, or is absent;~~  
~~each X is independently -H, a substituted or unsubstituted alkyl group, or an electron withdrawing group;~~  
~~Y is -C(O)Z-, -ZC(O)- or -S(CH<sub>2</sub>)<sub>n</sub>-;~~  
~~Z is a bond, CH<sub>2</sub>S, S, NH, or O;~~  
~~Z<sub>1</sub> is a bond, -C(O)NH-, -C(O)O-, -C<sub>6</sub>H<sub>4</sub>O-, or -C<sub>6</sub>H<sub>4</sub>NHC(O)-[[:]]~~  
~~m is an integer from 0 to 3;~~  
~~k is an integer from 0 to 4; and~~  
~~n is an integer from 0 to 5.~~

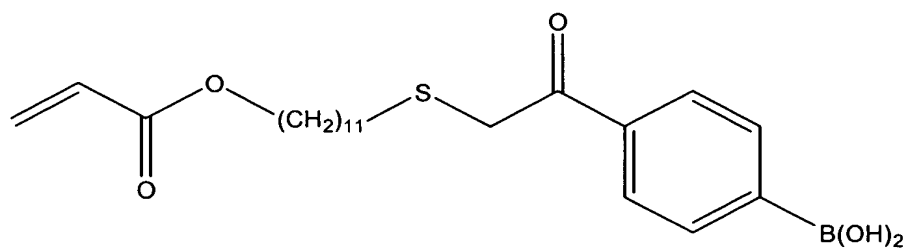
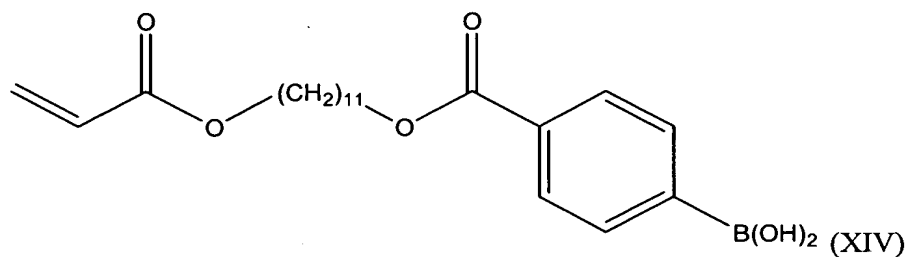
7. **(Original)** The polymer of Claim 6, wherein R<sub>1</sub> is -H or -CH<sub>3</sub>; each X is independently -H, a halogen, nitrile, ester or sulfone.
8. **(Currently Amended)** The polymer of Claim 7, wherein said polymer is comprised of polymerized monomer units are represented by Structural Formula (XII) or (XIII):



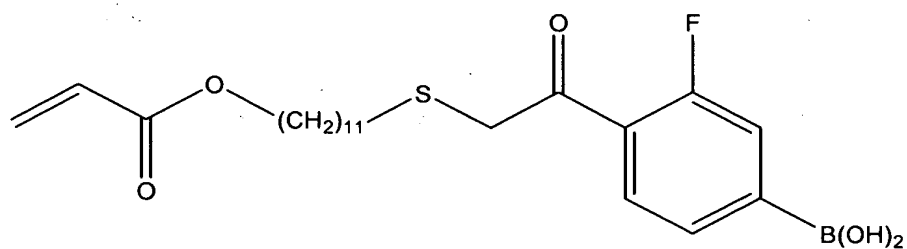
wherein X<sub>1</sub> and X<sub>2</sub> are each independently -H, a halogen or nitrile; and Y is -C(O)Z- or -ZC(O)-.

9. **(Original)** The polymer of Claim 8, wherein R is a C6-C12 alkylene group; R<sub>1</sub> is -H; X<sub>1</sub> and X<sub>2</sub> are each independently -H or -F; Y is -OC(O)- or -SCH<sub>2</sub>C(O)-; and Z<sub>1</sub> is -C(O)O-.

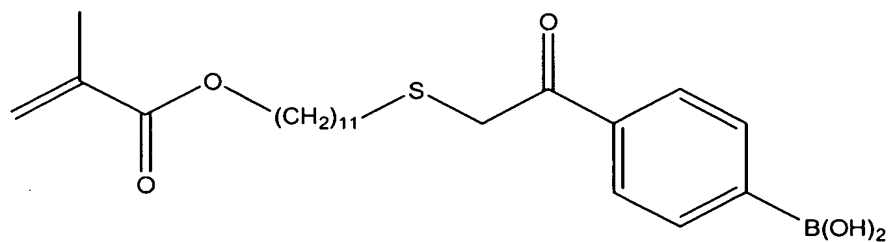
10. **(Currently Amended)** The polymer of Claim 9, wherein ~~said polymer is comprised of polymerized monomer units, wherein the monomer unit is~~ units are represented by Structural Formula (XIV), (XV), (XVI), or (XVII):



(XV)



(XVI)

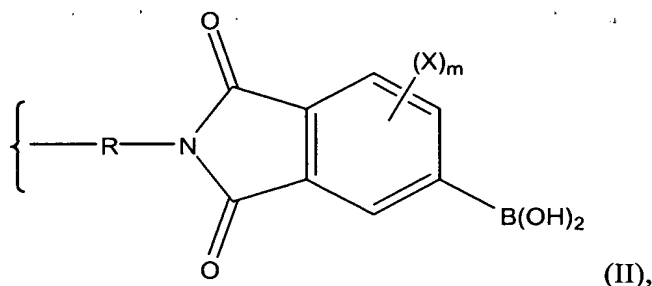
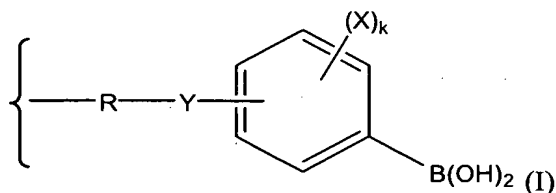


(XVII).

11. **(Original)** The polymer of Claim 1, wherein said polymer is a copolymer.
12. **(Original)** The copolymer of Claim 11, wherein said copolymer comprises a hydrophobic repeat unit.

13. **(Original)** The copolymer of Claim 11, wherein said copolymer comprises a cationic, anionic, zwitterionic, or neutral hydrophilic repeat unit.
14. **(Original)** The copolymer of Claim 13, wherein said copolymer comprises an anionic repeat unit or a zwitterionic repeat unit.
15. **(Original)** The copolymer of Claim 14, wherein the anionic repeat unit or zwitterionic repeat unit comprises a sulfonic acid moiety or a salt thereof.
16. **(Original)** The copolymer of Claim 15, wherein the anionic repeat unit is polymerized 2-acrylamido-2-methyl-1-propane sulfonic acid or a salt thereof; polymerized styrene sulfonic acid or a salt thereof; or polymerized 3-acrylatopropane sulfonic acid or a salt thereof.
17. **(Original)** The copolymer of Claim 13, wherein said copolymer comprises a polyether sidechain.
18. **(Original)** The copolymer of Claim 13, wherein said copolymer is a block copolymer, a graft copolymer, a comb copolymer, a star copolymer, a dendrimer, a hyperbranched polymer, or a crosslinked hydrogel.
- 19-23. **(Canceled)**
24. **(Currently Amended)** The copolymer of Claim ~~23~~ 16, wherein the copolymer is poly{4-(14'-acryloxy-3'-thia-1'-keto)tetradecyl phenyl boronic acid-co-potassium 3-sulfopropyl acrylate}}, poly{4-(14'-methacryloxy-3'-thia-1'-keto)tetradecyl phenyl boronic acid-co-sodium 4-styrene sulfonate}, poly{11-acryloxyundecyl(4-boronato)benzoate-co-sodium 2-acrylamido-2-methyl-1-propanesulfonate}, poly{4-(14'-acryloxy-3'-thia-1'-keto)tetradecyl phenyl boronic acid-co-sodium 2-acrylamido-2-methyl-1-propanesulfonate}, or poly{4-(14'-acryloxy-3'-thia-1'-keto)tetradecyl phenyl boronic acid-co-sodium-4-styrene sulfonate}.

25. **(Original)** A method for treating obesity in a mammal, comprising the step of orally administering to the mammal an effective amount of a polymer substituted with at least one group represented by Structural Formula (I) or (II):



wherein:

R is a C6-C30 hydrocarbylene group optionally interrupted by one or more heteroatoms selected from the group consisting of NH, S, and O;

R<sub>1</sub> is -H or a lower alkyl group;

R<sub>2</sub> is -H, a lower alkyl group, or is absent;

each X is independently -H, a substituted or unsubstituted alkyl group, an electron withdrawing group, or an electron donating group meta to the boronic acid moiety;

Y is -C(O)Z-, -ZC(O)- or -S(CH<sub>2</sub>)<sub>n</sub>-;

Z is a bond, CH<sub>2</sub>S, S, NH, or O;

Z<sub>1</sub> is a bond, -C(O)NH-, -C(O)O-, -C<sub>6</sub>H<sub>4</sub>O-, or -C<sub>6</sub>H<sub>4</sub>NHC(O)-;

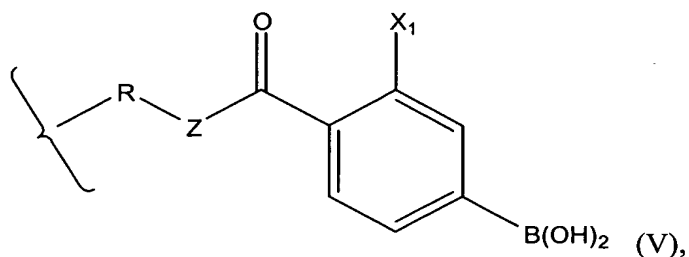
m is an integer from 0 to 3;

k is an integer from 0 to 4;

n is an integer from 0 to 5.

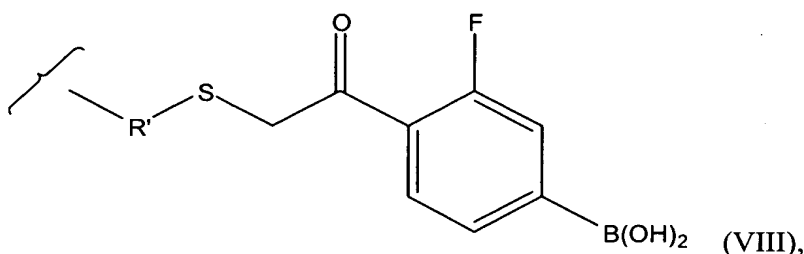
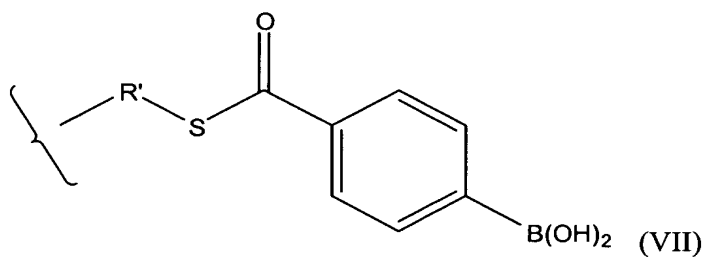
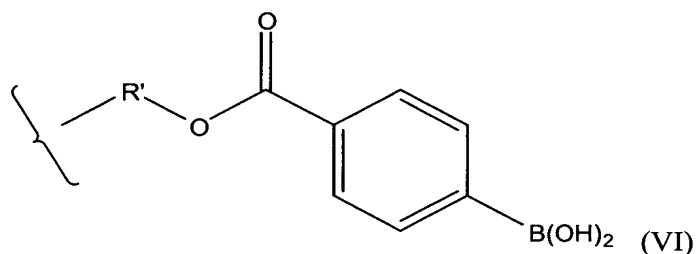
26. **(Original)** The method of Claim 25, further comprising the step of administering a fat binding polymer to the mammal.
27. **(Original)** The method of Claim 25, wherein each X is independently -H, a halogen, nitrile, ester or sulfone.

28. **(Currently Amended)** The method of Claim 27, wherein said polymer is substituted with at least one group represented by Structural Formula (V):



wherein X<sub>1</sub> is -H, a halogen, or nitrile ~~and~~.

29. **(Original)** The method of Claim 28, wherein the polymer is substituted with at least one group represented by Structural Formula (VI), (VII), or (VIII):

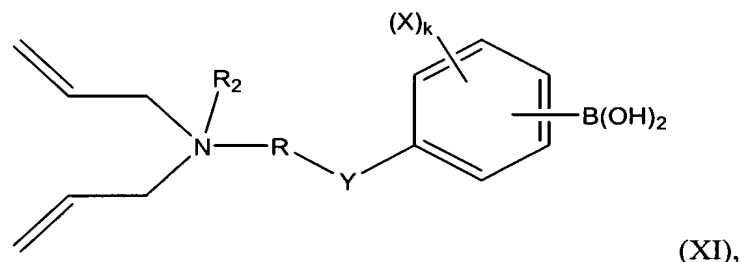
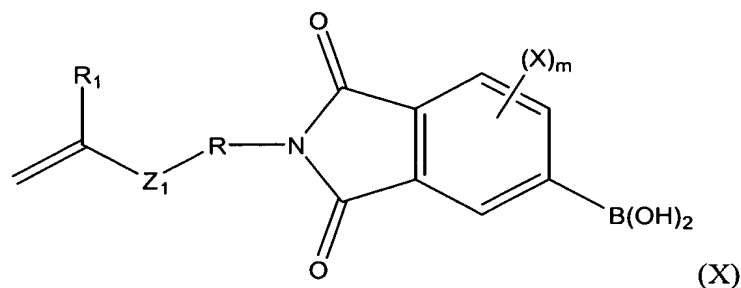
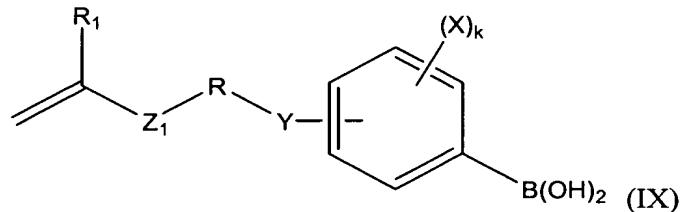


wherein R' is a C6-C12 alkylene group.

30. **(Currently Amended)** ~~A The method of claim 25 for treating obesity in a mammal, comprising the step of orally administering to the mammal an effective amount of a~~



~~wherein the polymer comprised of~~ comprises polymerized monomer units, ~~wherein the monomer unit is represented by Structural Formula (IX), (X), or (XI):~~



wherein:

~~R is a C6-C30 hydrocarbylene group optionally interrupted by one or more heteroatoms selected from the group consisting of NH, S, and O;~~

~~R<sub>1</sub> is -H or a lower alkyl group;~~

~~R<sub>2</sub> is -H, a lower alkyl group, or is absent;~~

~~each X is independently -H, a substituted or unsubstituted alkyl group, or an electron withdrawing group;~~

~~Y is -C(O)Z-, -ZC(O)- or -S(CH<sub>2</sub>)<sub>n</sub>-;~~

~~Z is a bond, CH<sub>2</sub>S, S, NH, or O;~~

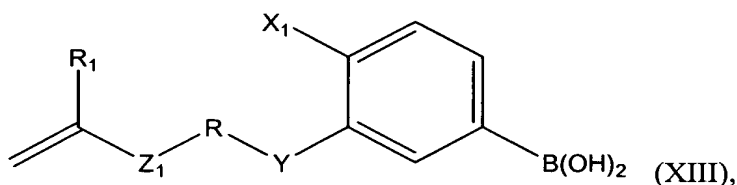
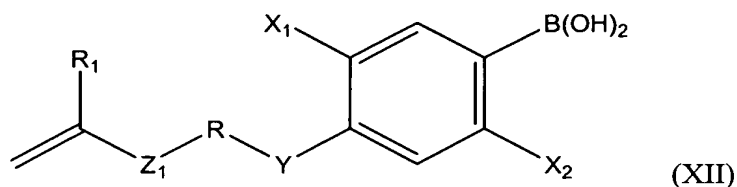
~~Z<sub>1</sub> is a bond, -C(O)NH-, -C(O)O-, -C<sub>6</sub>H<sub>4</sub>O-, or -C<sub>6</sub>H<sub>4</sub>NHC(O)-[[:]]~~

~~m is an integer from 0 to 3;~~

~~k is an integer from 0 to 4; and~~

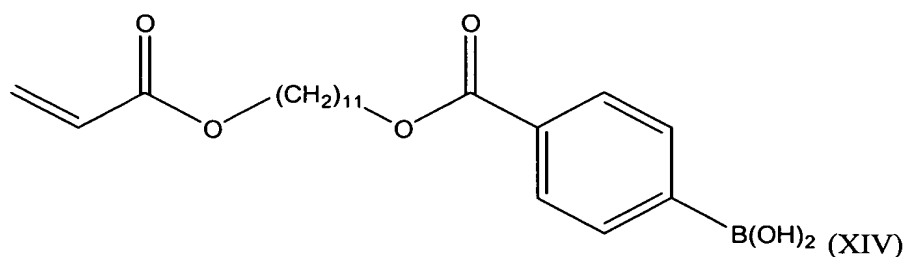
~~n is an integer from 0 to 5.~~

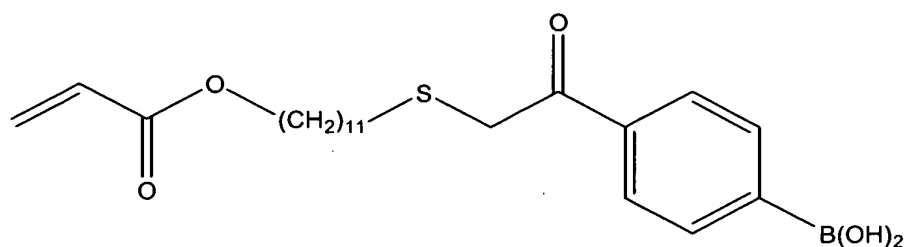
31. **(Original)** The method of Claim 30, further comprising the step of administering a fat binding polymer to the mammal.
32. **(Currently Amended)** The method of Claim 30, wherein  $R_1$  is  $-H$  or  $-CH_3$ ; and each  $X[.]$  is independently  $-H$ , a halogen, nitrile, ester or sulfone.
33. **(Currently Amended)** The method of Claim 32, wherein ~~said polymer is comprised of polymerized monomer units, wherein the monomer unit is~~ units are represented by Structural Formula (XII) or (XIII):



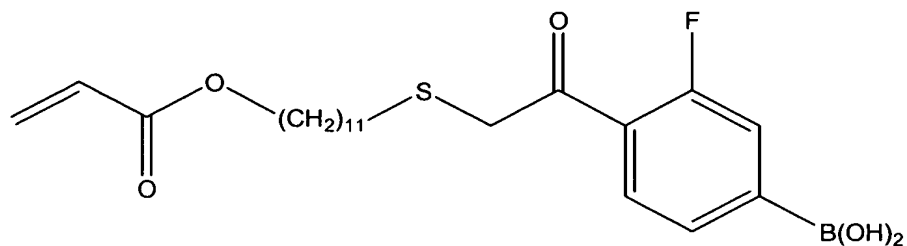
wherein  $X_1$  and  $X_2$  are each independently  $-H$ , a halogen or nitrile and  $Y$  is  $-C(O)Z-$  or  $-ZC(O)-$ .

34. **(Original)** The method of Claim 33, wherein  $R$  is a  $C_6$ - $C_{12}$  alkylene group;  $R_1$  is  $-H$ ;  $X_1$  and  $X_2$  are each independently  $-H$  or  $-F$ ;  $Y$  is  $-OC(O)-$  or  $-SCH_2C(O)-$ ; and  $Z_1$  is  $-C(O)O-$ .
35. **(Currently Amended)** The method of Claim 34, wherein ~~said polymer is comprised of polymerized monomer units, wherein the monomer unit is~~ units are represented by Structural Formula (XIV), (XV), (XVI) or (XVII):

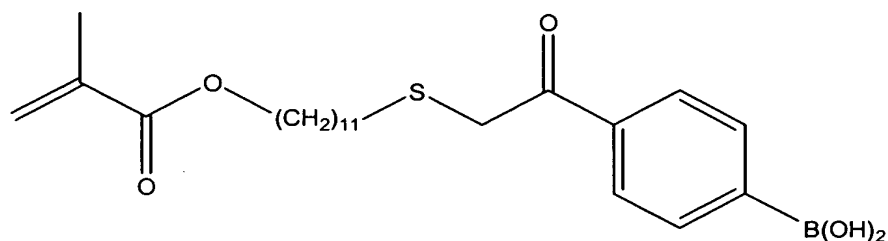




(XV)



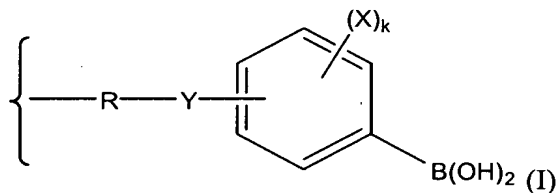
(XVI)

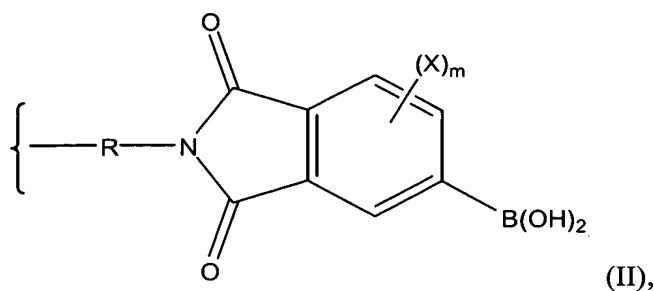


(XVII).

36. **(Original)** The method of Claim 30, wherein the polymer is a copolymer.
37. **(Original)** The method of Claim 36, wherein the copolymer comprises a hydrophobic repeat unit.
38. **(Original)** The method of Claim 36, wherein the copolymer comprises a cationic, anionic, zwitterionic, or neutral hydrophilic repeat unit.
39. **(Original)** The method of Claim 38, wherein the copolymer comprises an anionic repeat unit or a zwitterionic repeat unit.
40. **(Original)** The method of Claim 39, wherein the anionic repeat unit or zwitterionic repeat unit comprises a sulfonic acid moiety or a salt thereof.

41. **(Original)** The method of Claim 40, wherein the anionic repeat unit is polymerized 2-acrylamido-2-methyl-1-propane sulfonic acid or a salt thereof; polymerized styrene sulfonic acid or a salt thereof; or polymerized 3-acrylato-1-propane sulfonic acid or a salt thereof.
42. **(Original)** The method of Claim 38, wherein the copolymer is a block copolymer, a graft copolymer, a comb copolymer, a star copolymer, a dendrimer, a hyperbranched polymer, or a crosslinked hydrogel.
- 43-47. **(Canceled)**
48. **(Currently Amended)** The method of Claim ~~47~~ 41, wherein the copolymer is poly{4-(14'-acryloxy-3'-thia-1'-keto)tetradecyl phenyl boronic acid-co-potassium 3-sulfopropyl acrylate)}, poly{4-(14'-methacryloxy-3'-thia-1'-keto)tetradecyl phenyl boronic acid-co-sodium 4-styrene sulfonate}, poly{11-acryloxyundecyl(4-boronato)benzoate-co-sodium 2-acrylamido-2-methyl-1-propanesulfonate}, poly{4-(14'-acryloxy-3'-thia-1'-keto)tetradecyl phenyl boronic acid-co-sodium 2-acrylamido-2-methyl-1-propanesulfonate}, or poly{4-(14'-acryloxy-3'-thia-1'-keto)tetradecyl phenyl boronic acid-co-sodium-4-styrene sulfonate}.
49. **(Original)** A method for reducing absorption of fat in a mammal in need of such treatment, comprising the step of orally administering to the mammal an effective amount of a polymer substituted with at least one group represented by Structural Formula (I) or (II):





wherein:

R is a C6-C30 hydrocarbylene group optionally interrupted by one or more heteroatoms selected from the group consisting of NH, S and O;

each X is independently -H, a substituted or unsubstituted alkyl group, an electron withdrawing group, or an electron donating group meta to the boronic acid moiety;

Y is -C(O)Z-, -ZC(O)- or -S(CH<sub>2</sub>)<sub>n</sub>-;

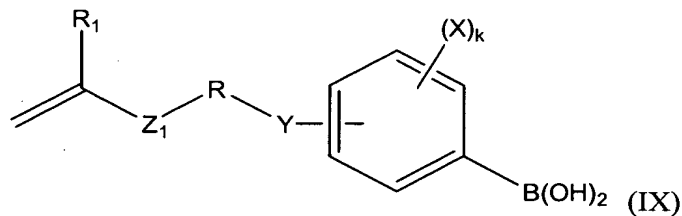
Z is a bond, CH<sub>2</sub>S, S, NH, or O;

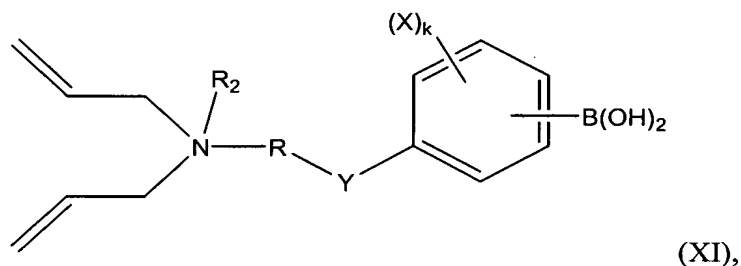
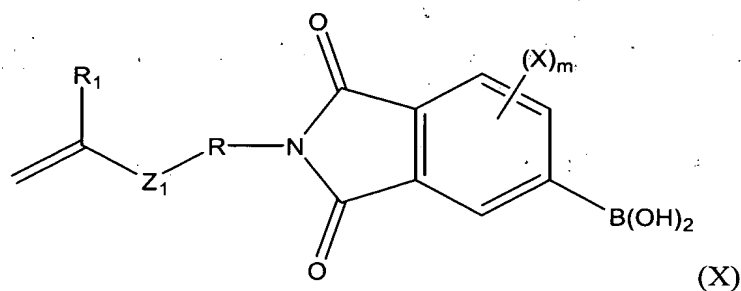
m is an integer from 0 to 3;

k is an integer from 0 to 4; and

n is an integer from 0 to 5.

50. **(Original)** The method of Claim 49, further comprising the step of administering a fat binding polymer to the mammal.
51. **(Currently Amended)** A The method of claim 49 for reducing absorption of fat in a mammal in need of such treatment, comprising the step of orally administering to the mammal an effective amount of a wherein the polymer comprised of comprises polymerized monomer units, wherein the monomer unit is represented by Structural Formula (IX), (X), or (XI):





wherein:

~~R is a C6-C30 hydrocarbylene group optionally interrupted by one or more heteroatoms selected from the group consisting of NH, S, and O;~~

~~R<sub>1</sub> is -H or a lower alkyl group;~~

~~R<sub>2</sub> is -H, a lower alkyl group, or is absent;~~

~~each X is independently H, a substituted or unsubstituted alkyl group, or an electron withdrawing group;~~

~~Y is -C(O)Z-, -ZC(O)- or -S(CH<sub>2</sub>)<sub>n</sub>-;~~

~~Z is a bond, CH<sub>2</sub>S, S, NH, or O;~~

~~Z<sub>1</sub> is a bond, -C(O)NH-, -C(O)O-, -C<sub>6</sub>H<sub>4</sub>O-, or -C<sub>6</sub>H<sub>4</sub>NHC(O)-[[:]]~~

~~m is an integer from 0 to 3;~~

~~k is an integer from 0 to 4; and~~

~~n is an integer from 0 to 5.~~

52. (Canceled)

53. (Currently Amended) The method of Claim 54 49, wherein the polymer is a copolymer is selected from poly{4-(14'-acryloxy-3'-thia-1'-keto)tetradecyl phenyl boronic acid-co-potassium 3-sulfopropyl acrylate}}, poly{4-(14'-methacryloxy-3'-thia-1'-keto)tetradecyl phenyl boronic acid-co-sodium 4-styrene sulfonate}}, poly{11-acryloxyundecyl(4-boronato)bezoate-co-sodium 2-acrylamido-2-methyl-1-propanesulfonate}}, poly{4-(14'-acryloxy-3'-thia-1'-keto)tetradecyl phenyl boronic

acid-co-sodium 2-acrylamido-2-methyl-1-propanesulfonate}, or poly{4-(14'-acryloxy-3'-thia-1'-keto)tetradecyl phenyl boronic acid-co-sodium-4-styrene sulfonate}.

54. (New) The method of claim 49, wherein the subject is afflicted with one or more conditions selected from obesity, Type II diabetes mellitus, impaired glucose tolerance, hypertension, coronary thrombosis, stroke, lipid syndromes, hyperglycemia, hypertriglyceridemia, hyperlipidemia, sleep apnea, hiatal hernia, reflux esophagitis, osteoarthritis, gout, cancers associated with weight gain, gallstones, kidney stones, pulmonary hypertension, infertility and cardiovascular disease.
55. (New) A composition comprising the polymer of claim 1, and a pharmaceutically-acceptable carrier.